

Environmentally Preferable Purchasing

Purchasing Recycled Materials:

Purchasing products that contain recycled materials helps develop a market for recycled products. Government agencies play a crucial role in making recycling programs economically viable by purchasing large quantities of recycled goods, and thereby allowing large scale recycling to become more efficient and more cost effective.

The Montgomery County Code requires that products containing recycled materials be purchased wherever possible. Specifically, Article XIII states that, *“each Using Department must review the procurement specifications used or to be used by the department and, to the extent practicable:*

- (A) require use of goods containing recycled materials;*
- (B) provide for use of a percentage price preference not to exceed 10%;*
- (C) or both.”*

A complete copy of the section of the County Code referring to the procurement of goods containing recycled materials is attached.

Many of the products used by the County are available in versions that contain recycled materials. The most obvious product is paper. The County Code requires that paper or paper products purchased contain a high level of post-consumer waste content (80%). If such a product is unavailable, a product meeting EPA standards will meet the Code requirement (see Table 1).

Recycled paper products include such things as copy paper, stationary, envelopes, post-it notes, forms, tabloids, tickets, brochures, parking stickers, mailers, bond paper, boxes, computer paper, maps, business cards, napkins, paper towels, and various printing papers. When making purchases of any paper products it is important to ask whether a recycled product is available, and about the recycled content of the product. Many new products can be tested by purchasing small quantities and comparing them in use to existing products.

Recycled materials are also available in unexpected products, such as staplers, tape dispensers, other desk accessories, carpeting, furniture, bituminous concrete, latex paint, engine coolants and lubricants, floor tiles, patio blocks, traffic cones, insulation, litter baskets, benches, printer cartridges, scissors, lumber, and numerous products used daily in every facility. EPA standards for many of these products are attached in Tables 2 through 19.

Vendor catalogues used to purchase office supplies often indicate which products contain recycled materials. Purchase these products whenever they meet usage requirements.

Information on purchasing recycled products can be found in [The Official Recycled Products](#)

Guide, which is available at the Office of Procurement. The EPA's "Waste Wise" web site www.epa.gov/wastewise is an excellent resource. Information is also provided by the Northeast Maryland Waste Disposal Authority .

Energy Efficient Products:

Purchasing energy efficient products saves money over the long term. Most energy efficient products pay for themselves, in reduced energy costs, within the first couple years. Saving energy also reduces environmental emissions and helps mitigate global climate change. Look for products with the "Energy Star" label. These products have been certified by the Environmental Protection Agency and the Department of Energy as meeting high standards for quality and energy efficiency.

The "Energy Star" Purchasing Took Kit contains guidelines, specifications, and drop-in procurement language for purchasing energy efficient products. It also provides a list of sources where you can find energy efficient products and software for calculating energy savings. To get a copy of the Purchasing Tool Kit, call **1-888-STAR-YES** (1-888-782-7937) or go to the "Energy Star" web site at www.energystar.gov.

Lighting

New technology lamps, ballasts, fixtures and sensors provide energy savings of 40% to 90% over older versions. Montgomery County's Department of Public Works and Transportation, Division of Facilities and services has completed lighting retrofits in all County facilities. Making sure that lighting continues to operate at maximum efficiency is important. Incandescent bulbs can be replaced with newer compact fluorescent bulbs. Funds spent on the purchase of electricity can be kept to a minimum by turning off lights when not in use.

Computers

The use of computers has increased the demand for electricity in County facilities. Computers can be operated more efficiently by turning machines off at the end of the day and over weekends and holidays. This reduces the amount of dust that gets sucked in to the computer, and reduces vulnerability to power surges. Reducing the use of screen savers also allows efficient computers to power down when not in use, and reduces the amount of power drawn by the monitor. Despite common belief, a screen saver does not save energy. Games running in the background will also prevent the computer from going to sleep, even if the game is paused.

Computers and monitors that are "Energy Star" compliant use significantly less power than other systems, and usually cost the same or less. When purchasing new computers, make sure that you request that the vendor include the following features:

- Provide computers that are configured so that they automatically enter a low-power mode after a period of inactivity.
- Provide monitors that have the capability to automatically enter two successive low-power modes.
- Ship computers with the power management feature enabled.

- For integrated systems, where the computer and monitor are combined in a single unit, provide systems that will enter a low-power mode of no more than 45 Watts after a specified period of inactivity
- Provide computers in low-power mode that will automatically return to active mode upon resumption of system activity or receipt of external input (such as mouse movement, keyboard activity, etc.).
- Provide computers that will include one or more mechanism through which they can activate the low-power modes.
- Provide computers that are capable of entering an fully recovering from the low-power “sleep” mode while running in at least one of the operating systems pre-installed before shipping.
- For network environments, provide computers that will sleep on networks and respond to wake events.

Office Equipment

Most equipment purchased for an office can be made energy efficient with little or no increase in cost. “Energy Star” specifications are helpful in making purchases of copiers, multifunction devices, printers, faxes and printer/fax machines, scanners, TVs, and VCRs.

Copiers can be operated more efficiently if they are turned off in the evenings or over weekends and holidays. It is also best to make two sided or duplex copies whenever possible. This saves paper and trees, as well as energy.

Efficient copiers shift to a low-power or “off” mode when not in use, and have a brief default time for shifting modes (typically 15 minutes for low-power and 30 to 90 minutes for “off”). The recover time should be 30 seconds or less. When purchasing a new copier, you can insure energy efficiency by requiring that it be “Energy Star” compliant. You can also require that the vendor ship medium-speed and high-speed copiers with a duplexing capability that is set as the default mode, and ship any copier with the power management features enabled. The same requirements can be made of multifunction devices.

Energy efficient printers, faxes, and printer/fax combinations also shift to a low-power or “sleep” mode when not in use. For a machine that processes less than 7 pages per minute (ppm), the low-power mode should use 15 Watts or less, and the default time should be 15 minutes for a printer and 5 minutes for a fax. If the ppm rate is 7 to 14, the low-power mode should use 30 Watts or less, and the default time should be 30 minutes for a printer and 5 minutes for a fax. If the ppm rate is greater than 14, the energy used during low-power mode should be less than 45Watts, and the default time should be 60 minutes for a printer and 15 minutes for a fax. As with copiers, it is wise to make sure that the machines are shipped with the energy efficient features enabled and with adequate information provided to the user on the energy efficient features of the product.

Energy efficient scanners can be purchased with a low-power mode that uses 12 Watts or less. Make sure that they are properly configured upon arrival and that you get product literature regarding the energy efficient features.

TV's, VCR's use less electricity if they are equipped with an energy efficient standby mode. When purchasing a TV make sure to include the specification that it use 3 Watts or less of power when in the standby mode. For a VCR, require that it use 4 Watts or less of power when in the standby mode. And, for a TV/VCR combination unit, require that it use 6 Watts or less of power when in the standby mode.

Cleaning Products:

Environmentally preferable products can be used in place of many cleaning products. Cleaning products often contain toxic chemicals that get washed down the drain and find their way into streams and drinking water supplies. Alternatives include citrus-based products that replace petroleum and chlorinated cleaners, spot removers and graffiti removers. Substitutes can also be found for products containing ammonia or organic solvents such as toluene, xylene, benzene or perchloroethylene.

Benefits of using alternative cleaning products include: fewer adverse health effects to workers from toxic compounds, fewer toxic releases from the manufacture of the products, fewer hazards in the municipal solid waste stream, less ecosystem destruction from persistent chemicals, less smog and ozone depletion, and less waste due to better packaging.

A list of some of the environmentally preferable cleaning products on the market is available from the nonprofit organization, Green Seal, as part of their Choose Green Report at www.greenseal.org. When purchasing cleaning products look for products that are non-toxic to aquatic life and humans, are biodegradable, have phosphate and phosphonate concentrations that are less than 0.5% by weight, and work optimally when diluted with cold water.

Printing:

You can reduce the environmental impact of print jobs by following a few basic guidelines:

- Request the lightest weight paper that will work for the print piece.
- Choose uncoated paper.
- Ask for a design that will use the smallest amount of paper, let the designer know that you want to save paper, make the piece compatible with paper and press sizes, and minimize paper waste and "trim" in the production of the piece.
- Avoid foil stamping or coatings.
- Avoid metallic inks. Alternatives to metallic inks include vegetable oil inks, water-based inks, and radiation-curable inks.
- Ask if bleeds are causing unnecessary paper waste.
- Specify adhesives that don't contain VOCs.
- Request the use of blanket washes that don't contain VOCs.

Lithographic printers require the use of blanket washes which typically contain VOCs. These blanket washes pose a health threat to workers and are damaging to the environment. It is possible to use alternatives to VOC containing blanket washes without compromising cost or effectiveness. Such products include: vegetable esters derived from agricultural products, petroleum/vegetable ester blends, vegetable ester/water blends, or terpene derived from citrus or wood products.

Vegetable esters have shown good performance and can reduce the cost of handling hazardous waste, such as excess wash or used wipes. They also require less wash for a given job in some circumstances, and their low-flammability may reduce insurance costs. Some names for vegetable esters that you might find on an MSDS or product label are: fatty acid methyl esters, diethanolamine tallate, sorbitan compounds, soybean oils, tall oils, methyl stearates, methyl oleate, and crillet 4.

Additional Information:

The National Association of Counties (NACo) has a program for Environmentally Preferable Purchasing. NACo provides assistance to counties including implementation strategies, case studies, and information packets. Packets can be ordered through the web site at www.naco.org and are currently available on the following categories:

- automobile and fleet maintenance/alternative fueled vehicles
- cleaners
- pesticides and herbicides
- office supplies
- painting
- printing
- construction and demolition
- green buildings/energy efficiency

Attachment:

ARTICLE XIII. PROCUREMENT OF RECYCLED MATERIALS.

Sec. 11B-56. Procurement of goods containing recycled materials.

(d) *Definitions.* In this Section, unless the context indicates otherwise, the following terms have the following meanings:

- (1) Paper includes paper board, bleached or unbleached paper, bond paper, computer paper, cotton fiber content paper, ledger and tabulating paper, offset printing or mimeo paper, office paper, printing paper, newsprint, stationery, writing paper, and xerographic or copy paper.
- (2) Paper product means any item manufactured from paper or paperboard. It includes corrugated and fiberboard boxes, folding boxboard, envelopes, facial or toilet tissue, paper towels, and paper napkins.
- (3) Percentage price preference means the percent by which a responsive bid from a responsible bidder whose product contains recycled materials (or a greater use of recycled materials) may exceed the lowest responsive bid submitted by a responsible bidder whose product does not contain recycled materials (or a lesser use of recycled materials).
- (4) Post-consumer waste means an item that has passed through its end-usage as a consumer item such as old newspapers, magazines, used corrugated containers, and office waste material. It does not include waste generated during production of an end product such as printer's waste.
- (5) Recycled material means material recovered from or otherwise diverted from the waste stream, including recycled paper. It includes post-consumer waste, industrial scrap material, and obsolete inventories. It does not include mill broke or similar paper waste generated in a paper mill before completion of the paper making process or, in other industries, those materials and by-products generated in and commonly reused within an original manufacturing process.
- (6) Recycled paper means:
 - (A) paper or a paper product that contains recycled materials with a total gross content of post-consumer waste of at least 80%;
 - (B) if a paper or paper product meeting the requirements of subparagraph (A) is unavailable or otherwise impracticable to procure, the paper or paper product has been de-inked or contains a level of post-consumer waste that exceeds the then

current minimum content standards of the U.S. Environmental Protection Agency for paper and paper products containing recovered materials (40 CFR 250); or

(C) if a paper or paper product meeting the requirements of subparagraphs (A) or (B) is unavailable or otherwise impracticable to procure, the paper or paper product conforms to the then current minimum content standards adopted by the U.S. Environmental Protection Agency for paper and paper products containing recovered materials (40 CFR 250).

(b) *Procurement specification review; use of recycled materials.*

(1) Notwithstanding any other provision of this Chapter, each Using Department must review the procurement specifications used or to be used by the department and, to the extent practicable:

(A) require use of goods containing recycled materials;

(B) provide for use of a percentage price preference not to exceed 10%;

(C) or both.

If the Using Department is unable to determine whether or not a desired good containing recycled materials is available, the procurement specifications should include a provision that a specified percentage price preference, not to exceed 10%, will be given to a bidder offering an acceptable requested good containing recycled materials consistent with this Section.

(2) In an assessment of the practicability of a procurement specification for goods containing recycled materials the Using Department must consider, among other relevant factors:

(A) product availability;

(B) product suitability for intended County use, including whether the product meets established performance standards; and

(C) cost.

A procurement specification for a good containing recycled materials may be considered impracticable if the estimated cost of the good containing recycled materials exceeds the average cost of similar products that have not been recycled by more than 10 percent.

(3) If the Using Department makes a determination that a specification for a good containing recycled materials is not practicable, written documentation must be placed

in the contract file. The documentation must explain the agency determination and reference any specific tests used to evaluate performance.

- (4) A decision on use of a specification for a good containing recycled materials or a percentage price preference is within the sole discretion of the County and is not appealable under Article VII.

(c) *Recycled Paper Goal.* Procurement of paper and paper products should be structured to attempt to achieve the goal that at least 50% of the total dollar value of paper and paper products purchased by or for County government is recycled paper. To the extent possible, any cooperative purchasing agreement with the Montgomery County Schools or other entity should be similarly structured.

(d) *Role of Office of Procurement and Department of Public Works and Transportation; Executive Regulations; Indirect Purchases.*

(1) The Office of Procurement must review all specifications of the Using Departments and all cooperative purchasing agreements to ensure compliance with this Section, appropriate use of percentage price preferences, and consistency among Using Departments procuring similar goods. To the extent available, the Office of Procurement must provide the Using Departments with lists of acceptable products containing recycled materials published by the State of Maryland for use by state agencies or any similar information developed by the County.

(2) The Department of Public Works and Transportation must provide technical assistance, when requested by the Office of Procurement or a Using Department, concerning recycled material content in any product, or similar matters.

(3) In adopting any regulations to administer this Section, the County Executive may, to the extent consistent with this Section, incorporate guidelines of the U.S. Environmental Protection Agency concerning the use of products containing materials recovered from solid waste, including cement and concrete containing fly ash, paper and paper products, asphalt materials, oils and hydraulic fluids, and retread tires.

(4) Regulations or contract specifications may be adopted that provide minimum recycled content requirements. In addition, provision should be made for estimates by vendors, certification, and verification of the amount of recycled content in goods supplied to the County under this Section.

(5) The County may require use of recycled materials for purchases by contractors or grantees using appropriated County funds.

(e) *Report by Office of Procurement.* The Director, in consultation with the Director of Public Works and Transportation, must submit a report to the County Council and County Executive by September 30 each year about implementation of this Section for the prior fiscal year. The report must describe County government efforts to encourage the maximum purchase of goods containing

recycled materials under this Section and recommend measures that could increase County purchases of goods containing recycled materials. The report should specifically provide:

(1) the dollar value of recycled paper purchased and the dollar value of all other paper and paper products purchased;

(2) to the extent ascertainable, the quantity and dollar value of recycled paper purchased with:

(A) at least 80% post-consumer waste content; and

(B) other post-consumer waste or waste paper characteristics determined relevant by the County Executive;

(3) a summary of major specification revisions made during the year by the Using Departments and in any cooperative purchasing arrangement;

(4) the dollar value of goods procured under this Section containing recycled materials, other than recycled paper;

(5) a summary of determinations that compliance with this Section is impracticable;

(6) a review of the variation, if any, between estimates and certifications concerning the recycled content in goods supplied to the County under this Section;

(7) the cost to the County of implementing this Section;

(8) suggested legislative or administrative changes; and

(9) any other relevant information. (1994 L.M.C., ch. 30, § 1; 1996 L.M.C., ch. 20, § 1.)

Editor's note-1998 L.M.C., ch. 12, §1, amending Section 5 of 1996 L.M.C., ch. 20, reads:

"Sunset. On July 1, 2001, any function transferred by this Act to the Department of Permitting Services reverts to the Department which administered that function before this Act took effect [August 1, 1996]."

